

Safety at NIST Update to the VCAT

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Acting Director, CSTL and
Chair, NIST Safety Council

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SAFETY FIRST

Key Message

The safety of everyone who works at or visits NIST is a top priority.

The poster is a vibrant collage of images representing different NIST divisions and their work. At the top, it lists several NIST divisions: Economics & Statistics Administration, National Oceanic & Atmospheric Administration, Economic Development Administration, Bureau of Industry & Security, Minority Business Development Agency, U.S. Patent & Trademark Office, Bureau of Economic Analysis, and Bureau of the Census. The central text reads "Safety is Priority 1" in large, bold, yellow and orange letters. Below this, a quote from Deputy Secretary Samuel Bodman states: "As a Commerce, the safety and well-being of our employees is paramount. Deputy Secretary Samuel Bodman and I are personally committed to ensuring that each employee is provided with a safe and healthy working environment. We are working to expand and enhance the Commerce Safety Program to better serve you and keep you informed on safety issues throughout the Department. Every employee must make safety their first priority. We encourage you to take an active part in workplace safety. To learn more about the safety program, and how you can make your workplace safer, please visit our website at <http://nistrm.doc.gov/safetyprogram/safety.htm>." The quote is signed by Donald L. Evans, Secretary of Commerce. The collage includes images of people working in laboratories, offices, and industrial settings, as well as a large satellite dish and a space shuttle launch.

NIST's Safety Commitment

To make the NIST workplace as safe as possible, we will:

- Set a goal for NIST of zero lost-time accidents.
- Continually communicate and emphasize the importance of safety.
- Hold ourselves and each other accountable for ensuring a safe workplace.
- Promptly correct unsafe conditions where possible, and immediately call NIST's safety action hotline to report unsafe conditions.

NIST Safety Council

The Safety Council was established to:

- Provide the Senior Management Board with information, advice and policy options to ensure NIST preeminence in safety for employees, visitors, partners, associates and the community.
- Review overall NIST safety and physical security practices.
- Carry out issue-specific research needed to make recommendations and provide policy alternatives.
- Develop the NIST Safety Plan, updated annually.

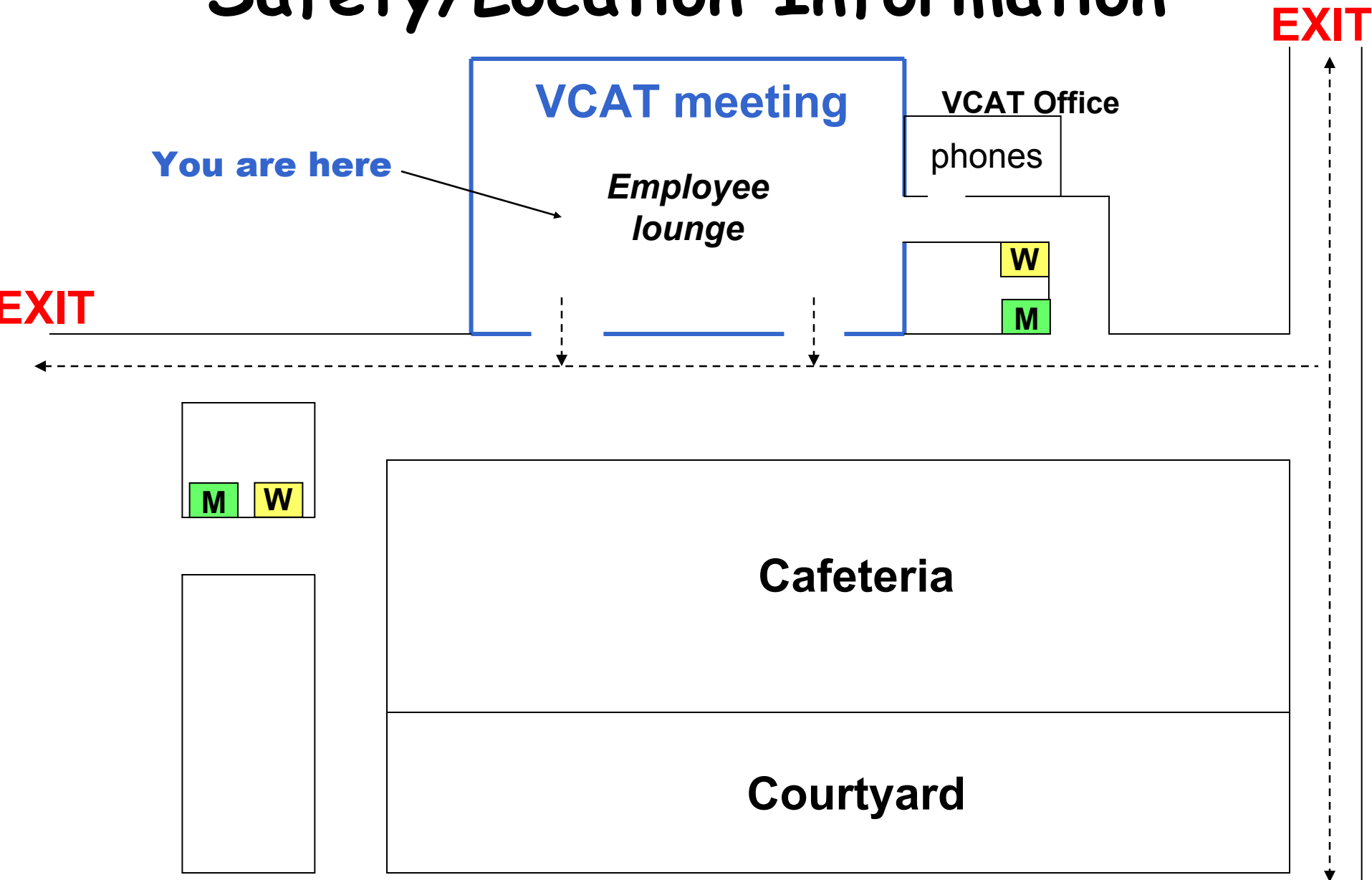
NIST Safety Website



NIST Senior Management Safety Awareness

- DuPont Senior Management Training
- Senior Management Site Visits to the Experimental Station, DuPont CR&D
- Sharing of Best Practices
 - http://www-i.nist.gov/director/mgt_mtgs/safety_practices.htm
- Emphasis at SMB and Other NIST meetings

Safety/Location Information



NIST Safety Plan

Accomplishments FY 2003

- Facilitated Safety Walkthroughs with OU Director, Division Chiefs and OHSD Specialist
- Created NIST Safety Operational Committee
- Provided Incident Investigation and Root Cause Analysis Training by National Safety Council to All Supervisors
- Installed Automatic External Defibrillators
- Celebrated National Safety Month

National Safety Month



National Safety Month



OU Specific Highlights, FY 2003

BFRL

- Remediation of overhead crane safety issues

CSTL

- Dupont benchmarking
- DuPont observation and coaching training
- Safety stand-down days

EEEL

- DuPont benchmarking
- Observation and coaching training
- Laser safety policy
- Cross-division safety walkthroughs

ITL

- Safety stand-down days
- Tall book-cases secured

OU Specific Highlights, FY 2003

MSEL

- Site visit to DuPont Experimental Station
- Protective window film

PL

- Automatic External Defibrillators in Ft. Collins and Hawaii
- Lab renovations to address egress/crowding

TS

- External audit of facilities

DA/CFO

- Light duty procedures
- M-slip priority guidelines
- Formalize incident investigation procedures

Our Safety Acronyms

- LWIFR = Lost Workday Incident Frequency Rate
 $= (I/EH) \times 200,000$
- LWISR = Lost Workday Incident Severity Rate
 $= (D/EH) \times 200,000$
- Total Case Rate = $(C/EH) \times 200,000$
- where I = no. of lost workday incidents, D = no. of lost workdays, and C = no. of medical treatment and lost workday cases;
- EH = total hours worked by all employees during calendar year; and
- 200,000 = base for 100 equivalent full-time workers (40 hr/wk, 50 wk/yr)

Lost Work Day Incident Frequency and Severity per 100 Employees, FY 2003

| Location | LWIFR | LWISR |
|--------------|-------|-------|
| All NIST | 1.1 | 21 |
| NIST G'burg | 0.8 | 15 |
| NIST Boulder | 3.4 | 68 |
| All Labs | 0.5 | 14 |
| Labs G'burg | 0.5 | 9 |
| Labs Boulder | 1.0 | 45 |
| Plant G'burg | 4.2 | 115 |
| EMSS Boulder | 15.2 | 163 |

Benchmarks vs. Other Institutions

Total Case Rate and Lost Workday Rate for FY 2002

| <u>Agency</u> | <u>Total Case Rate*</u> | <u>LWIFR</u> |
|---------------|-------------------------|--------------|
| NIST | 2.1 | 0.7 |
| DOE | 2.1 | 0.9 |
| NIH | 1.8 | 0.8 |
| FDA | 1.1 | 0.6 |
| NOAA | 1.8 | 0.6 |
| CDC | 2.4 | 1.2 |
| Federal Govt. | 3.9 | 1.7 |

*Includes medical treatment and lost work day incidents

Benchmarks vs. DOE Labs

Total Case Rate and Lost Workday Rate for FY 2002

| <u>Agency</u> | <u>Total Case Rate*</u> | <u>LWIFR</u> |
|--------------------|-------------------------|--------------|
| NIST | 2.1 | 0.7 |
| DOE | 2.1 | 0.9 |
| Argonne East | 2.2 | 1.3 |
| Argonne West | 3.9 | 2.1 |
| Lawrence Livermore | 2.5 | 0.6 |
| Los Alamos | 2.1 | 1.1 |
| Sandia | 3.9 | 1.5 |

*Includes medical treatment and lost work day incidents

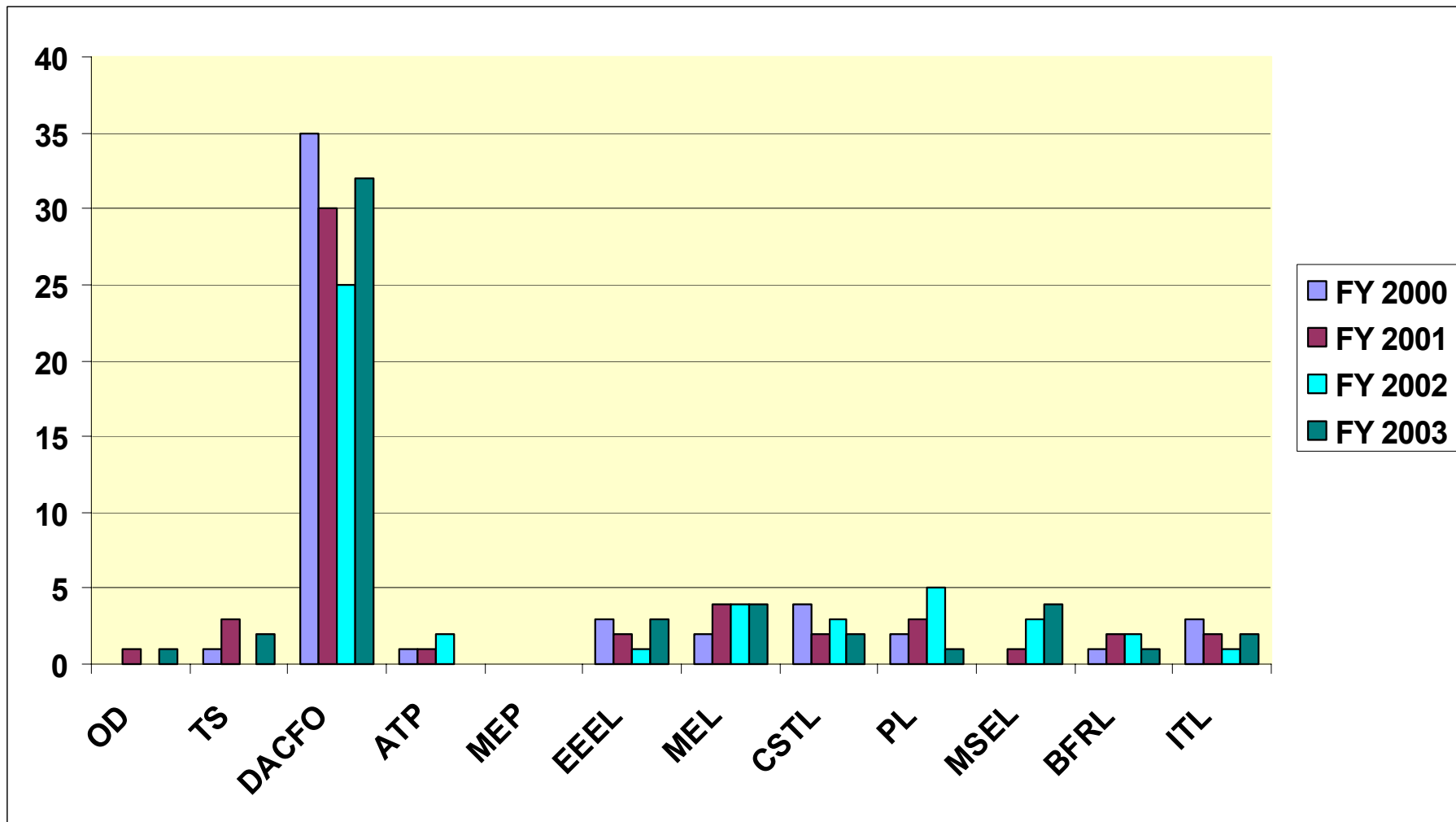
Benchmarks vs. Other Institutions

Total Case Rate and Lost Workday Rate for FY 2003

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|-----------------------|-------------------------|
| ■ NIST | 1.9 |
| ■ NOAA | 1.8 |
| ■ NIH | 1.7 |
| ■ USDA/ARS | 3.7 |
| ■ CDC | 1.5 |
| ■ DuPont Exp. Station | 1.1 |

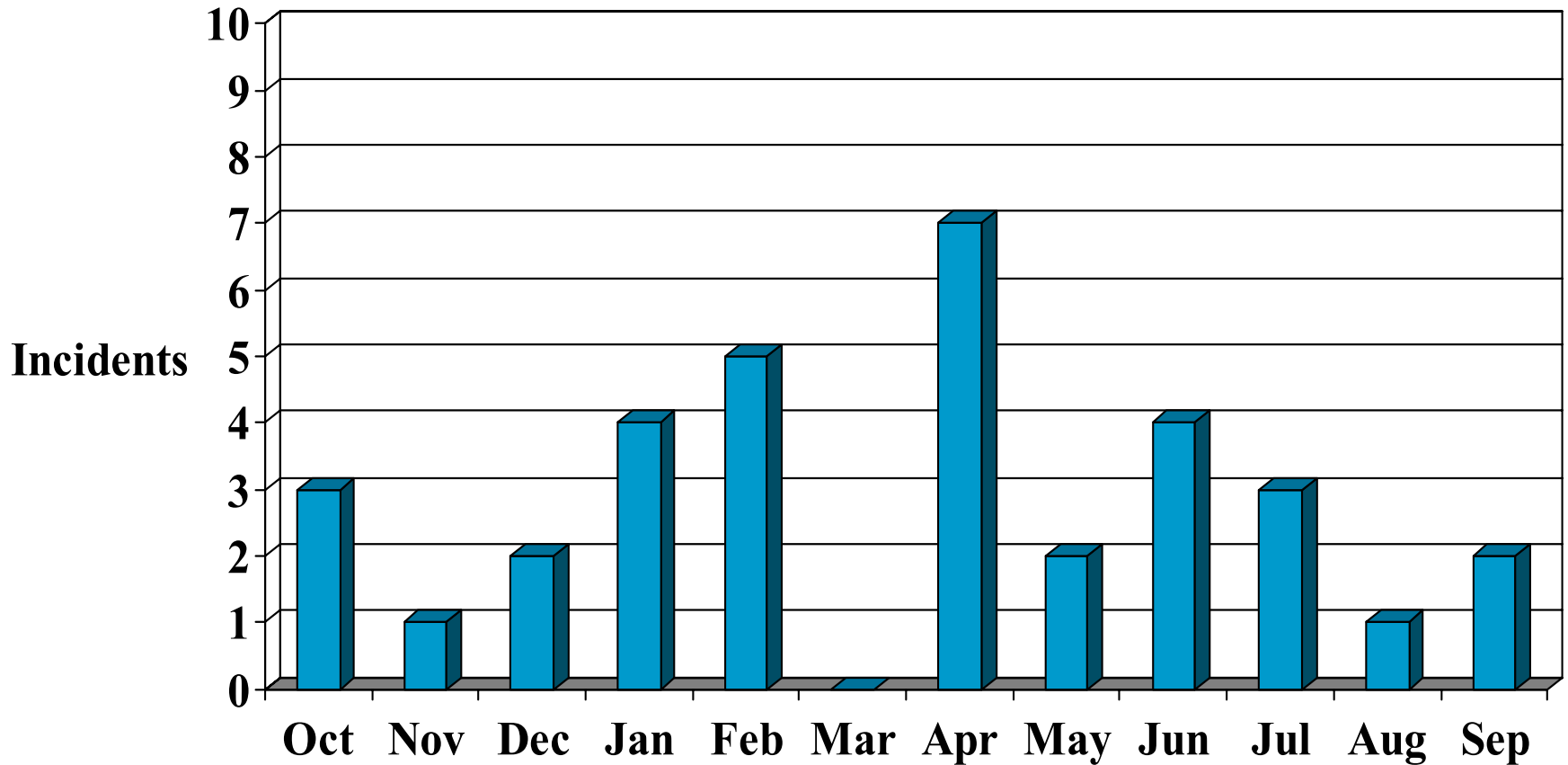
*Includes medical treatment and lost work day incidents

Incidents by OU All Staff FY 2000 Through FY 2003



Lost Work Day Incidents by Month

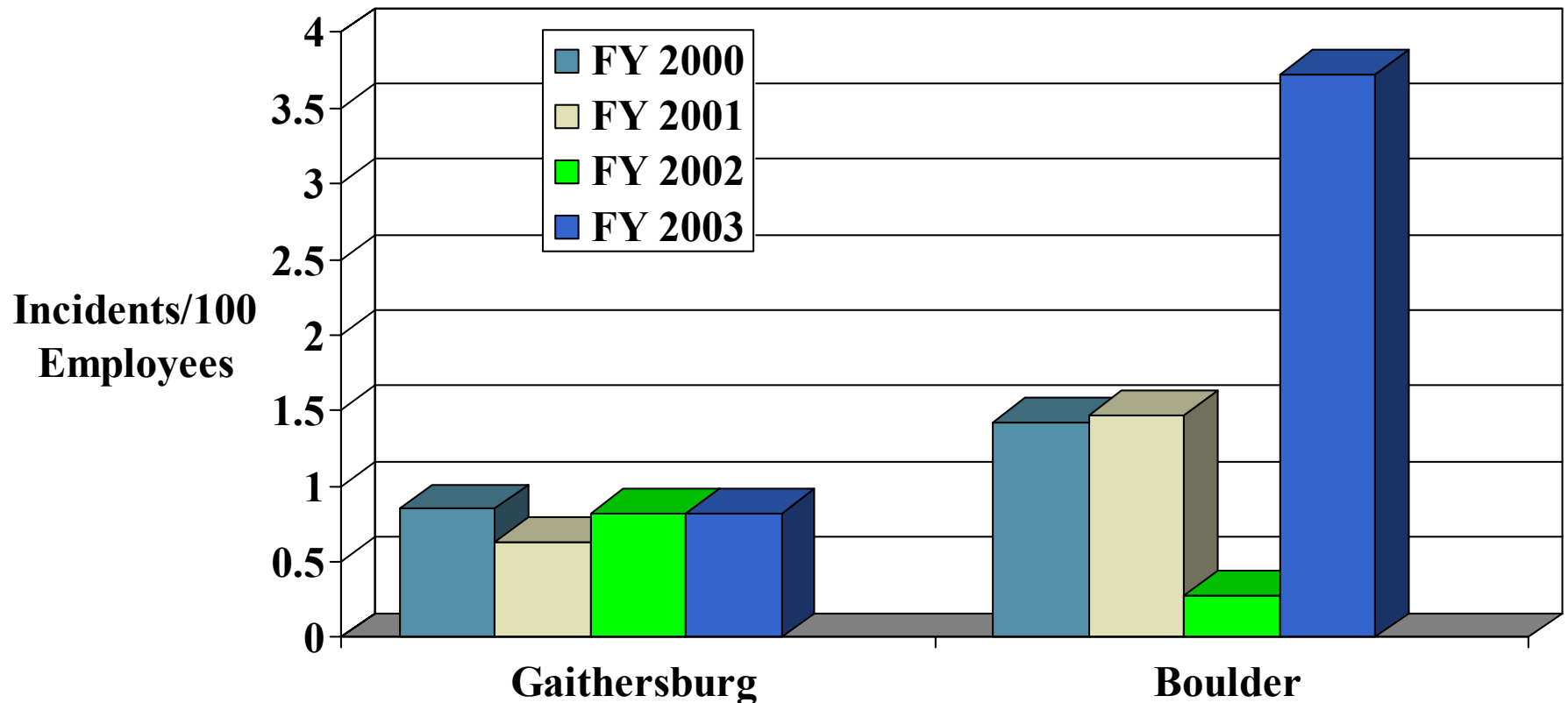
FY 2003



Number of Lost Workday Incidents

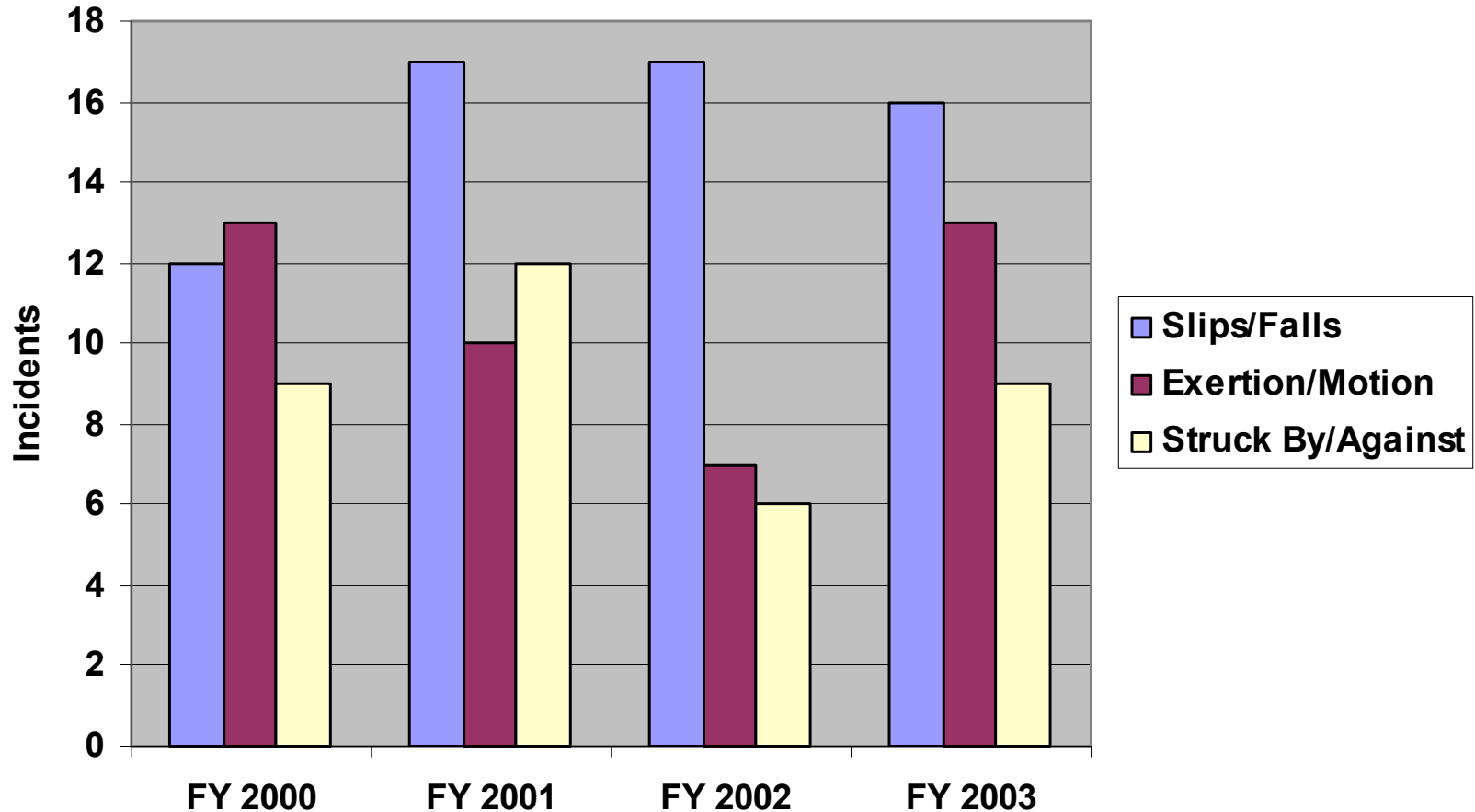
By Location - FY 2000 through FY 2003

All Staff - Normalized Per 100 Employees



Top Three Incidents by Category

All Staff –FY 2000 Through FY 2003



Significant Incident Descriptions

FY 2003

- Strain moving radio antenna (Hawaii) (146 LWD)
- Slip on ice NIST parking lot (100 LWD)
- Slip on ice at conference hotel (96 LWD)
- Traffic accident driving from training (53 LWD)
- Sprain lifting manhole cover (35 LWD)
- Partial thumb loss repairing generator (19 LWD)

Safety Plan Highlights, FY 2004

NIST-Wide

- **Implement Balanced Scorecard Metrics**
 - 25% reduction in lost workday incident frequency and severity from 5-year average
 - 4-hour mandatory safety training for new employees
- **Implement NIST Safety Operations Committee**
- **Prepare for AML occupation**
 - Install emergency phones
 - Address move-related safety issues
 - Ensure vacated labs are decommissioned

Safety Plan Highlights, FY 2004

DA/CFO

- Gaithersburg

- Safety and Health Fair 12/10/2003
- Ergonomics Program
- Prepare for winter; slips and falls
- Finalize Light Duty Procedure

- Boulder (EMSS)

- Personal Protective Equipment Program
- Construction Safety Awareness class
- 10-hour OSHA collateral duty training
- Safety coach for construction activities

Safety Operational Committee

Charge

- To implement NIST-wide activities required by the Safety Council and articulated in the NIST Safety Plan and to coordinate safety activities among various organizational units.

Composition

- Chair is Vice Chair of the Safety Council
- Vice Chairs established in Gaithersburg and Boulder
- Representation from each OU and administrative functional areas

Major FY 2004 Projects

- Update NIST Safety and Health Admin Manual Chapters
- Update NIST Laboratory and Office Safety Manuals
- Update Personal Protective Equipment Procedures
- Implement Safety Training for All Staff

Have a Safe Day!

